

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

**1-10. (canceled).**

**11. (currently amended):** A sterile microorganism growth substrate comprising:

(a) a sterilized nutrient composition, wherein said composition is a biomass generated from bacterial cells by autolysis, optionally followed by ultrafiltration and evaporation, wherein said bacterial cells comprise *Methylococcus capsulatus* (Bath) (strain NCIMB 41526), *Ralstonia* sp. DB3 (strain NCIMB 41527), *Aneurinibacillus* sp. DB4 (strain NCIMB 41528) and *Brevibacillus agri* DB5 (strain NCIMB 41525), and wherein said bacterial cells are at least 50% by weight *Methylococcus capsulatus* (Bath) (strain NCIMB 41526) relative to the total bacterial weight;

(b) at least one sterile nutrient, which is a carbon source, added to the biomass, wherein said at least one sterile nutrient is glucose; and

(c) optionally a sterile diluent.

**12. (canceled).**

**13. (previously presented):** The substrate as claimed in claim 11, wherein glucose is present in a weight ratio of 5:1 to 1:5, on a dry mass basis relative to the biomass.

**14. (previously presented):** The substrate as claimed in claim 35, wherein nitrate and mineral salts are present in a weight ratio of 0.01:1 to 0.2:1, relative to the biomass.

**15-24. (canceled).**

**25. (previously presented):** The substrate as claimed in claim 35, wherein said mineral salts are selected from the group consisting of potassium, calcium, magnesium, sodium, molybdenum, iron, zinc, boron, cobalt, manganese and nickel compounds.

**26. (previously presented):** The substrate as claimed in claim 13, wherein glucose is present in a weight ratio of 2:1 to 1:2, on a dry mass basis relative to the biomass.

**27. (previously presented):** The substrate as claimed in claim 14, wherein nitrate and mineral salts are present in a weight ratio of 0.05:1 to 0.1:1, relative to the biomass.

**28-29. (canceled).**

**30. (previously presented):** The substrate as claimed in claim 11, wherein the sterilized nutrient composition is a dried autolysate of a bacterial biomass.

**31. (previously presented):** The substrate as claimed in claim 11 or 37, wherein said bacterial cells are grown in a culture medium containing methane, oxygen, ammonia, and mineral feeds.

**32. (canceled).**

**33. (currently amended):** The substrate as claimed in claim ~~32~~31, wherein said ~~culture bacterial cells is from~~are 75% to 95% by weight *Methylococcus capsulatus* (Bath) (strain NCIMB 41526) relative to the total bacterial weight.

**34. (canceled).**

**35. (previously presented):** The substrate of claim 11 or 37, wherein nitrate or mineral salts, or combination thereof, are additionally added to the biomass.

**36. (canceled).**

**37. (currently amended):** A sterile microorganism growth substrate comprising:

(a) a sterilized nutrient composition, wherein said composition is a biomass generated from bacterial cells by autolysis followed by ultrafiltration and evaporation, wherein said bacterial cells comprise *Methylococcus capsulatus* (Bath) (strain NCIMB 41526), *Ralstonia* sp.

DB3 (strain NCIMB 41527), *Aneurinibacillus* sp. DB4 (strain NCIMB 41528) and *Brevibacillus agri* DB5 (strain NCIMB 41525), and wherein said bacterial cells are at least 50% by weight *Methylococcus capsulatus* (Bath) (strain NCIMB 41526) relative to the total bacterial weight;

- (b) at least one sterile nutrient, which is a carbon source, added to the biomass, wherein said at least one sterile nutrient is glucose; and
- (c) optionally a sterile diluent.